

NARSTO 1998 Model-Intercomparison Study Verification Data: NARSTO- Northeast 1995 Surface Ozone, NO, and NOX

Summary:

This data set supports the NARSTO Model Intercomparison activity described in the report of a workshop that was held in Washington, DC on May 27-28, 1998. The intercomparison activity will compare meteorological, emissions, and air quality models that are used to estimate ozone concentrations in the northeastern United States. The air quality models are used to estimate how ambient ozone concentrations will change in response to changes in VOC and NO_x emissions. These data are a subset of the measurements made during the NARSTO-Northeast 1995 intensive field campaign and will be used to verify model predictions. Included are surface one-hour average O₃, NO, and NO_x measurement results from all reporting sources for 1995. ASCII data files are available for specific time intervals and the full monitoring period. A measurement station description file is included.

Acknowledgement:

The data set should be cited as follows:

Mueller, Peter K. 1998. NARSTO 1998 Model-Intercomparison Study Verification Data: NARSTO-Northeast 1995 Surface Ozone, NO, and NO_x. Available online via [NARSTO Data and Information](#) from the Langley Distributed Active Archive Center, NASA Langley Research Center, Hampton, Virginia, U.S.A.

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1. Data Set Overview:

Data Set Identification:

NARSTO 1998 Model-Intercomparison Study Verification Data: NARSTO-Northeast 1995 Surface Ozone, NO, and NO_x

Data Set Introduction:

These data are a subset of the measurements made during the NARSTO-Northeast 1995 intensive field campaign and will be used to verify model predictions. Included are surface one-hour average O₃, NO, and NO_x measurement results from all reporting sources for 1995.

Objective/Purpose:

The Model Intercomparison activity will compare meteorological, emissions, and air quality models that are used to estimate ozone concentrations in the northeastern United States. The air quality models are used to estimate how ambient ozone concentrations will change in response to changes in VOC and NO_x emissions. These data will be used to verify model predictions.

Summary of Parameters:

Included are one-hour average O₃, NO, and NO_x measurement results from widely distributed surface monitoring stations.



Discussion:

These data are a subset of the measurements made during the NARSTO-Northeast 1995 intensive field campaign . Data were collected from May through September. One-hour average O3, NO, and NOX measurement results are reported for ground surface monitoring stations operated by various agencies including EPA AIRS, Castnet, ESE, Harvard University, NYSEG, PEPCO, and the University of Maryland.

Related Data Sets:

NARSTO 1998 Model-Intercomparison Study Verification Data: NARSTO-Northeast 1995 Monitoring Station Descriptions. (included)

Investigator(s):**Investigator(s) Name and Title:**

Alan Hansen, Project Coordinator

Title of Investigation:

NARSTO 1998 Model-Intercomparison Study Verification Data

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2. Applications:

The data will be used to verify model predictions.

3. Theory of Measurements:

Not Applicable

4. Acquisition Materials and Methods:

Not Applicable

Acquisition Equipment:**Sensor/Instrument Description:****Collection Environment:**

Not Applicable

Source/Platform:

Not Applicable

Source/Platform Mission Objectives:

Not Applicable

Key Variables:

Included are one-hour average O3, NO, and NOX measurement results from widely distributed surface monitoring stations.

Principles of Operation:

Not Applicable

Sensor/Instrument Measurement Geometry:

Not Applicable

Manufacturer of Sensor/Instrument:

Not Applicable

Calibration:

Specifications:

Not Applicable

Tolerance:

Not Applicable

Frequency of Calibration:

Not Applicable

Other Calibration Information:

Not Applicable

Data Acquisition Methods:

Not Applicable

Observations:

Data Notes:

Not Available

Field Notes:

Not Available

5. Preparation and Description:

Data Description:

Spatial Characteristics:

Spatial Coverage:

Data are provided from seven sources that collectively comprise 559 surface stations from sixteen northeastern U.S. states and the District of Columbia. Location information for each station is contained in the companion site data file.

Spatial Coverage Map:

Not Available

Spatial Resolution:

Not Available

Projection:

Not Available

Grid Description:

Not Available

Temporal Characteristics:

Temporal Coverage:

Hourly-averaged measurements are provided covering the period May 1-September 30, 1995.

Temporal Coverage Map:



Not Available

Temporal Resolution:

Not Available

Data Characteristics:

Data are described in the accompanying README_NARSTO_NE_MODEL.TXT file.

Parameter/Variable:

...

Variable Description/Definition:

...

Unit of Measurement:

...

Data Source:

...

Data Range:

...

Sample Data Record:

...

Data Organization:

Data Granularity:

Descriptions of the data files are contained in the accompanying README_NARSTO_NE_MODEL.TXT file.

A general description of data granularity as it applies to the IMS appears in the [EOSDIS Glossary](#).

Data Format:

Descriptions of the data files are contained in the accompanying README_NARSTO_NE_MODEL.TXT file.

Data Manipulations:

Formulae:

Derivation Techniques and Algorithms:

Not Applicable

Data Processing Sequence:

Processing Steps:

Not Applicable

Processing Changes:

Not Applicable

Calculations:



Special Corrections/Adjustments:

Not Applicable

Calculated Variables:

Not Applicable

Graphs and Plots:

Not Applicable

Errors:

Sources of Error:

Not Applicable

Quality Assessment:

Data Validation by Source:

Not Available

Confidence Level/Accuracy Judgment:

Not Available

Measurement Error for Parameters:

Not Available

Additional Quality Assessments:

Not Available

Data Verification by Data Center:

Not Available

6. Notes and Plans:

Limitations of the Data:

Not Available

Known Problems with the Data:

Not Available

Usage Guidance:

Not Available

Any Other Relevant Information about the Study:

Not Available

Future Modifications and Plans:

Not Available

7. Products and Access:

Contact Information:

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Data Center Identification:

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Procedures for Obtaining Data:

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Data Center Status/Plans:

...

Output Products and Availability:

...

Software:

Software Description:

Not Applicable

Software Access:

Not Applicable

8. References:

Lurmann, Frederick W. 1998. Summary Report of the NARSTO Model Intercomparison Workshop held in Washington D.C., May 27-28, 1998.

9. Glossary and Acronyms:

Glossary of Terms:

[EOSDIS Glossary.](#)

List of Acronyms:

[EOSDIS Acronyms.](#)

10. Document Information:

- **Document Revision Date:** August 7, 2002
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